

# Structure & Liftoff In Combustion Experiment Logo

A project's logo can be filled with symbolism and that of the SLICE experiment is no exception.

- The heraldic approach to the logo and the prominent use of the sword were inspired by the experiment's acronym, SLICE, wherein the researchers metaphorically <u>slice</u> open and dissect flames in order to gain a better understanding of their structure and the controlling mechanisms.
- The three curved blue lines in the logo's white center represent different shapes that the flame can assume as it lifts from the fuel tube (which is also represented) and becomes increasingly premixed (i.e., with oxygen entrainment into the gaseous fuel jet).
- The small µg symbol (on the tip of the burner tube) is an abbreviation for microgravity and represents that the experiment is conducted in the apparent weightlessness of free fall.
- The eighteen stars are in recognition of the cost of human space exploration, where that is the number of cosmonauts and astronauts who have thus far died in spaceflight missions (listed on the second page). The blue field of stars also represents the U.S. origin of this International Space Station experiment.



- The logo's blue and yellow coloring is based on the colors used by Yale University, e.g., in its coat of arms. Yale is the institution of SLICE Principal Investigator Prof. Marshall B. Long and Co-Investigator Prof. Mitchell D. Smooke.
- The scroll at the bottom of the coat of arms identifies the principal organizations involved in the experiment, namely Yale University (in New Haven, CT), the National Center for Space Exploration Research which is located at the NASA Glenn Research Center (In Cleveland, OH), the National Aeronautics and Space Administration, and ZIN Technologies (in Cleveland, Ohio).

The SLICE logo was designed by Dennis Stocker (a SLICE Co-Investigator) and graphic artist Gayle DiBiasio of the NASA Glenn Research Center.

## **SLICE Commemoration**

With the eighteen stars in its logo, SLICE commemorates the cosmonauts and astronauts who have thus far given their lives during spaceflight missions.

## **Soyuz 1** (April 24, 1967)

• Vladimir M. Komarov (sole crew member)

## **Soyuz 11** (June 30, 1971)

- Georgi T. Dobrovolsky (Commander)
- Vladislav N. Volkov (Flight Engineer)
- Viktor I. Patsayev (Research Engineer)

## Challenger STS-51L (January 28, 1986)

- Francis R. "Dick" Scobee (Commander)
- Michael J. Smith (Pilot)
- Ronald E. McNair (Mission Specialist)
- Ellison S. Onizuka (Mission Specialist)
- Judith A. Resnik (Mission Specialist)
- Gregory B. Jarvis (Payload Specialist)
- S. Christa McAuliffe (Teacher in Space)

## Columbia STS-107 (February 1, 2003)

- Rick D. Husband (Commander)
- William C. McCool (Pilot)
- Michael P. Anderson (Mission Specialist)
- David M. Brown (Mission Specialist)
- Kalpana Chawla (Mission Specialist)
- Laurel B. Clark (Mission Specialist)
- Ilan Ramon (Israeli Payload Specialist)



V. Komarov (Soyuz 1 crew)



Soyuz 11 crew



Challenger STS-51L crew



Columbia STS-107 crew